21. (New) The speech encoding system according to claim 13 where the second allocation of storage units per frame allocates a greater number of storage units to the adaptive codebook index than the first allocation of storage units to facilitate long-term predictive coding on a subframe-by-subframe basis.

22. (New) The speech encoding system according to claim 13 where the first allocation of storage units per frame allocates a greater number of storage units for the fixed codebook index than the second allocation does to reduce a quantization error associated with the fixed codebook index.

23. (New) The speech encoding system according to claim 13 where the second encoding scheme has a higher allocation ratio than the first encoding scheme, the allocation ratio defined by a number of storage units allocated to the adaptive codebook index divided by the number of storage units allocated to the adaptive codebook index plus the fixed codebook index.

24. (New) The speech encoding system according to claim 13 where, for full-rate coding, the first encoding scheme supports a first frame type and the second encoding scheme supports a second frame type different from the first frame type.

25. (New) The speech encoding system according to claim 13 where, for higher-rate coding, the first encoding scheme supports a first frame type and the second encoding scheme supports a second frame type, and for lower-rate coding the encoder supports a third frame type and a fourth frame type.

26. (New) The method according to claim 17 where the second allocation of storage units per frame allocates a greater number of storage units to the adaptive codebook index than the first allocation of storage units to facilitate long-term predictive coding on a subframe-by-subframe basis.

27. (New) The method according to claim 17 where the first allocation of storage units per frame allocates a greater number of storage units for the fixed codebook index than the second allocation does to reduce a quantization error associated with the fixed codebook index.

28. (New) The method according to claim 17 where the second encoding scheme has a higher allocation ratio than the first encoding scheme, the allocation ratio defined by a number of storage units allocated to the adaptive codebook index divided by the number of storage units allocated to the adaptive codebook index plus the fixed codebook index.

29. (New) The method according to claim 17 where, for full-rate coding, the first encoding scheme supports a first frame type and the second encoding scheme supports a second frame type different from the first frame type.

30. (New) The method according to claim 17 where, for higher-rate coding, the first encoding scheme supports a first frame type and the second encoding scheme supports a second frame type, and for lower-rate coding the encoder supports a third frame type and a fourth frame type.

31. (New) A speech encoding method comprising:

receiving a speech frame for encoding;

classifying said speech frame as a voiced speech frame if said speech frame includes a voiced speech component;

designating said voiced speech frame as a stationary voiced speech frame if said voiced speech frame is generally stationary, otherwise, designating said voiced speech frame as a non-stationary voiced speech frame; and

allocating a lesser number of bits for an adaptive codebook index of said

stationary voiced speech frame than for an adaptive codebook index of said non-stationary voiced

speech frame.

32. (New) The speech encoding method of claim 31 further comprising: allocating a

greater number of bits for a fixed codebook index of said stationary voiced speech frame than for

a fixed codebook index of said non-stationary voiced speech frame.

33. (New) The speech encoding method of claim 32 further comprising: transmitting said

bits to a decoding system.

34. (New) The speech encoding method of claim 32 further comprising:

determining whether an encoding rate for encoding said speech frame is a high

encoding rate or a low encoding rate;

using a first type frame to encode said stationary voiced speech frame if said

encoding rate is said high encoding rate; and

using a third type frame to encode said stationary voiced speech frame if said

encoding rate is said low encoding rate.

35. (New) The speech encoding method of claim 34 where said first type frame allocates

25 bits for filter coefficient indicators, 1 bit for a type indicator, 8 bits for said adaptive codebook

index, 120 bits for said fixed codebook index, 6 bits for an adaptive codebook gain, and 10 bits

for a fixed codebook gain.

36. (New) The speech encoding method of claim 34 where said third type frame allocates

21 bits for filter coefficient indicators, 1 bit for a type indicator, 7 bits for said adaptive codebook

index, 39 bits for said fixed codebook index, 4 bits for an adaptive codebook gain, and 8 bits for

a fixed codebook gain.

37. (New) The speech encoding method of claim 32 further comprising:

determining whether an encoding rate for encoding said speech frame is a high encoding rate or a low encoding rate;

using a second type frame to encode said non-stationary voiced speech frame if said encoding rate is said high encoding rate; and

using a fourth type frame to encode said non-stationary voiced speech frame if said encoding rate is said low encoding rate.

38. (New) The speech encoding method of claim 37 where said second type frame allocates 27 bits for filter coefficient indicators, 1 bit for a type indicator, 26 bits for said adaptive codebook index, 88 bits for said fixed codebook index, and 28 bits for an adaptive codebook gain and a fixed codebook gain.

39. (New) The speech encoding method of claim 37 where said fourth type frame allocates 21 bits for filter coefficient indicators, 1 bit for a type indicator, 14 bits for said adaptive codebook index, 30 bits for said fixed codebook index, 14 bits for an adaptive codebook gain and a fixed codebook gain.

40. (New) A speech encoding system comprising:

a receiver configured to receive a speech frame for encoding;

a classifier configured to classify said speech frame as a voiced speech frame if said speech frame includes a voiced speech component, said classifier further configured to designate said voiced speech frame as a stationary voiced speech frame if said voiced speech frame is generally stationary, otherwise, said classifier designates said voiced speech frame as a non-stationary voiced speech frame; and

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an encoder configured to allocate a lesser number of bits for an adaptive codebook index of said stationary voiced speech frame than for an adaptive codebook index of said non-stationary voiced speech frame.

41. (New) The speech encoding system of claim 40 where said encoder is further configured to allocate a greater number of bits for a fixed codebook index of said stationary voiced speech frame than for a fixed codebook index of said non-stationary voiced speech frame.

42. (New) The speech encoding system of claim 41 further comprising: a transmitter configured to transmit said bits to a decoding system.

43. (New) The speech encoding system of claim 41 where said encoder is further configured to: determine whether an encoding rate for encoding said speech frame is a high encoding rate or a low encoding rate, use a first type frame to encode said stationary voiced speech frame if said encoding rate is said high encoding rate, and use a third type frame to encode said stationary voiced speech frame if said encoding rate is said low encoding rate.

44. (New) The speech encoding system of claim 43 where said first type frame allocates 25 bits for filter coefficient indicators, 1 bit for a type indicator, 8 bits for said adaptive codebook index, 120 bits for said fixed codebook index, 6 bits for an adaptive codebook gain, and 10 bits for a fixed codebook gain.

45. (New) The speech encoding system of claim 43 where said third type frame allocates 21 bits for filter coefficient indicators, 1 bit for a type indicator, 7 bits for said adaptive codebook index, 39 bits for said fixed codebook index, 4 bits for an adaptive codebook gain, and 8 bits for a fixed codebook gain.

46. (New) The speech encoding system of claim 41 where said encoder is further configured to: determine whether an encoding rate for encoding said speech frame is a high

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encoding rate or a low encoding rate, use a second type frame to encode said non-stationary

voiced speech frame if said encoding rate is said high encoding rate, and use a fourth type frame

to encode said non-stationary voiced speech frame if said encoding rate is said low encoding rate.

47. (New) The speech encoding system of claim 46 where said second type frame

allocates 27 bits for filter coefficient indicators, 1 bit for a type indicator, 26 bits for said adaptive

codebook index, 88 bits for said fixed codebook index, and 28 bits for an adaptive codebook gain

and a fixed codebook gain.

48. (New) The speech encoding system of claim 46 where said fourth type frame allocates

21 bits for filter coefficient indicators, 1 bit for a type indicator, 14 bits for said adaptive

codebook index, 30 bits for said fixed codebook index, 14 bits for an adaptive codebook gain and

a fixed codebook gain.